



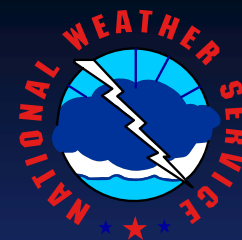
Our Good Earth

Mitigating its Natural Forces through Understanding

With an emphasis on Texas and its weather

TCU/UCC Presentation
Fort Worth, Texas, 05/17/06

Bill Proenza, Director
National Weather Service Southern Region
Fort Worth, Texas

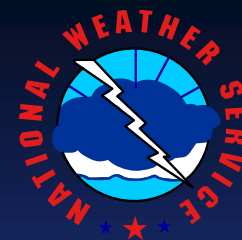
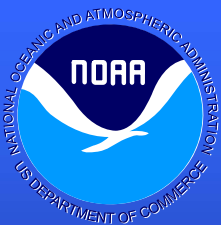


History of the National Weather Service

- Established as NWS in 1870 under the direction of the Army Signal Corps
- Transferred to the Department of Agriculture in 1890 and called the Weather Bureau.
- Transferred to the Department of Commerce in 1940
- Renamed the *National Weather Service* in 1970 under the new DOC bureau, National Oceanic and Atmospheric Administration

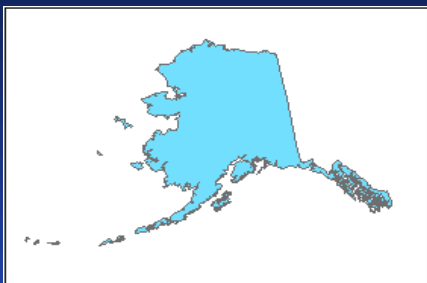
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NWS Southern Region



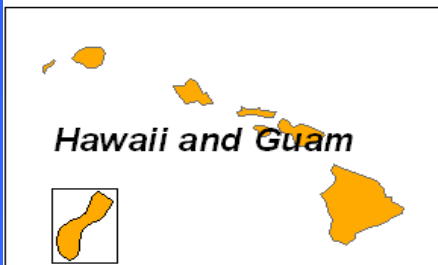
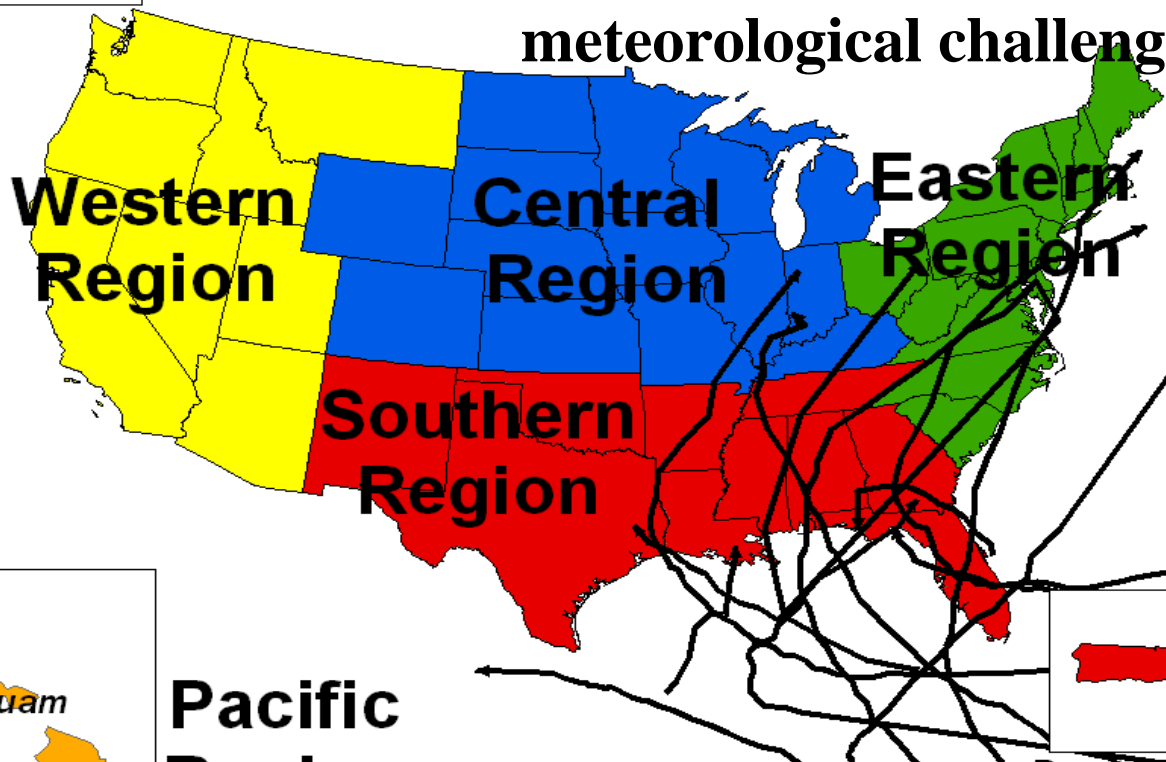
USA has 4 major contiguous NWS Regions and 2 State Regions

NWS Southern Region



Alaska Region

National Weather Service Regions
(based on areas with similar meteorological challenges)



Hawaii and Guam

Pacific Region



Puerto Rico and Virgin Islands



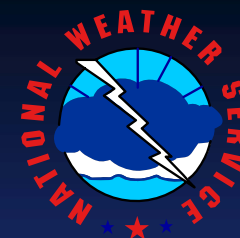
NWS Southern Region “ROC” (Regional Operations Center)

- Federal/State/Local EM and Media briefings
- NWS major weather event coordination
- Deploys staff to WFOs and/or “tactical mets” to your field command centers.
- Helps handle post event overflow for WFO’s



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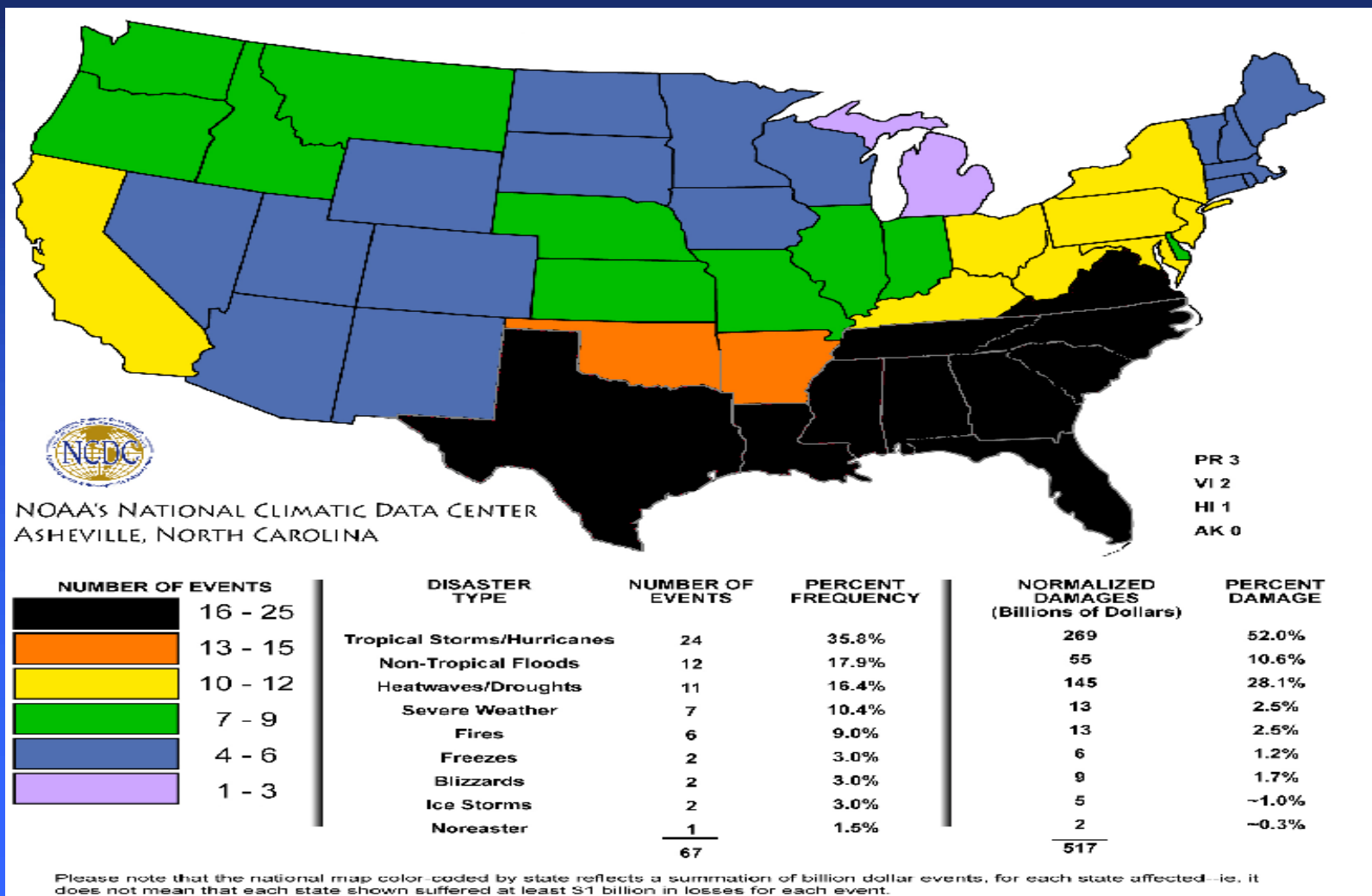
NWS Southern Region



World's Most Active & Costly Weather!

Billion Dollar Weather Events, 1980-2005

NWS Southern Region





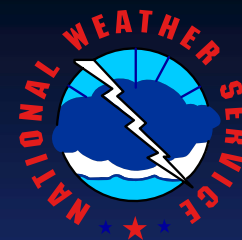
Local WFO Operations

- Provide and communicate the NWS mission including weather radar and radio broadcasts
- Issue all weather forecasts, warnings, watches, advisories, climate and weather information
- 122 offices cover every community and county/parish in U.S.A.

The best weather expertise for your local area

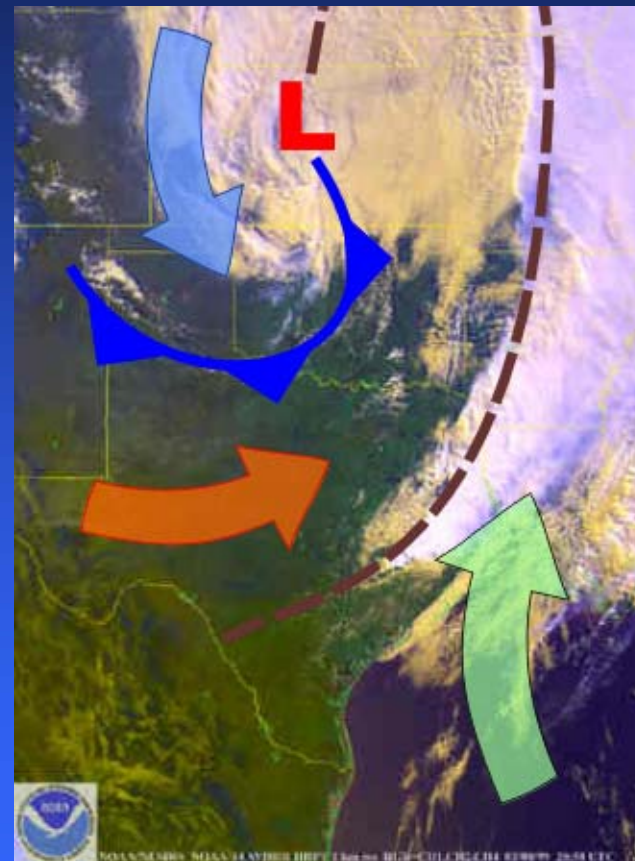
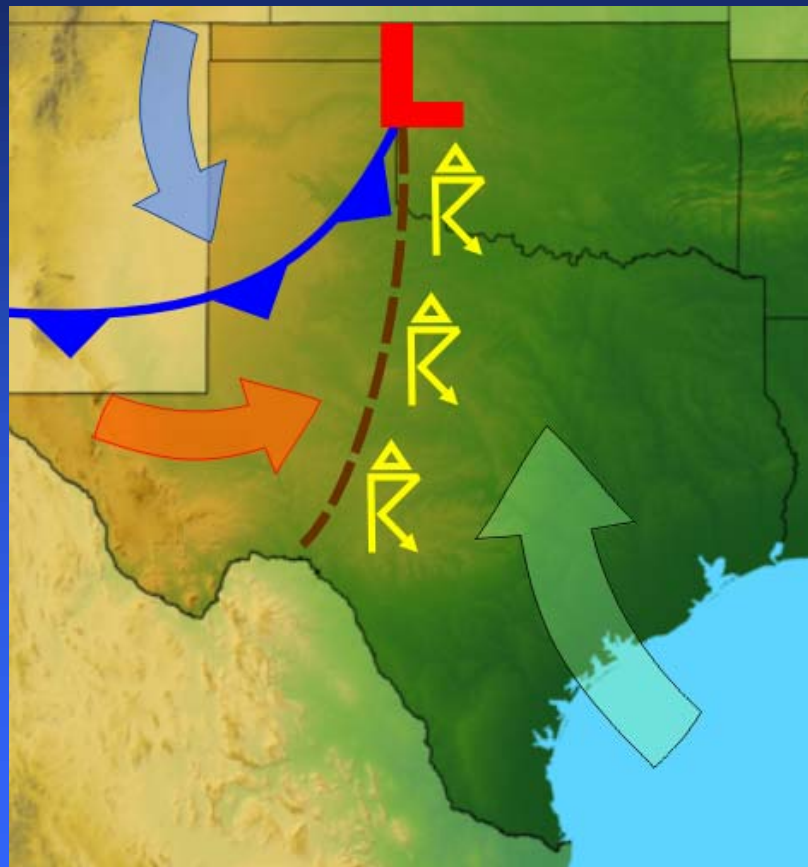
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NWS Southern Region

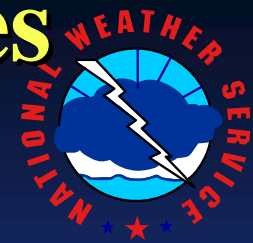


Origin of Texas Weather

NWS Southern Region

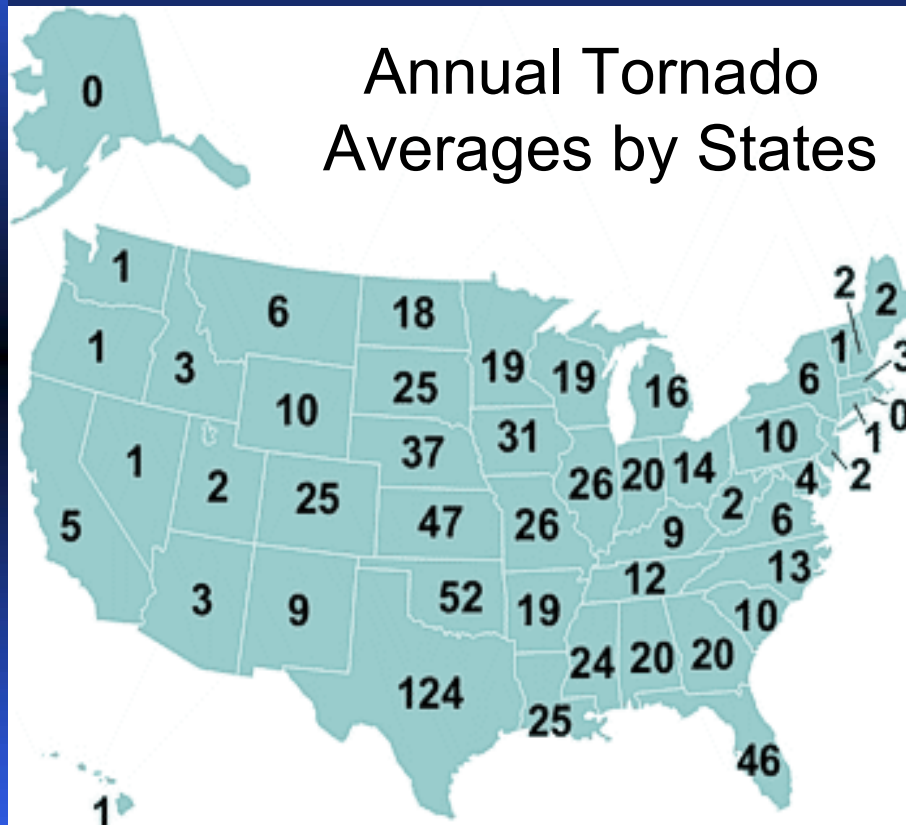


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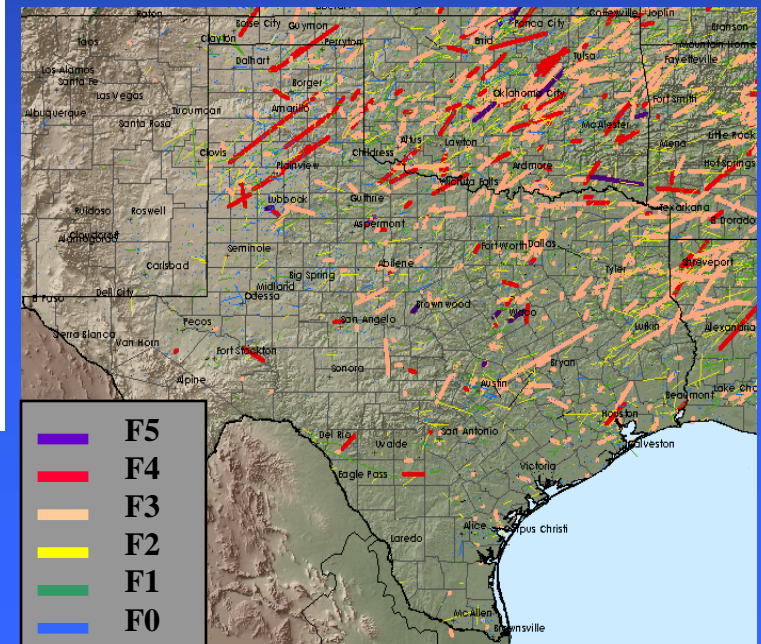
Texas averages more tornadoes than any state in the Union

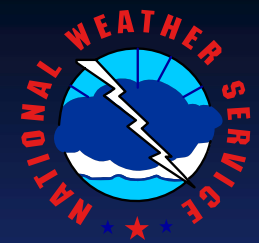
NWS Southern Region



1950-2002

- 6619 reported tornadoes
- 475 direct fatalities
- 5998 injuries

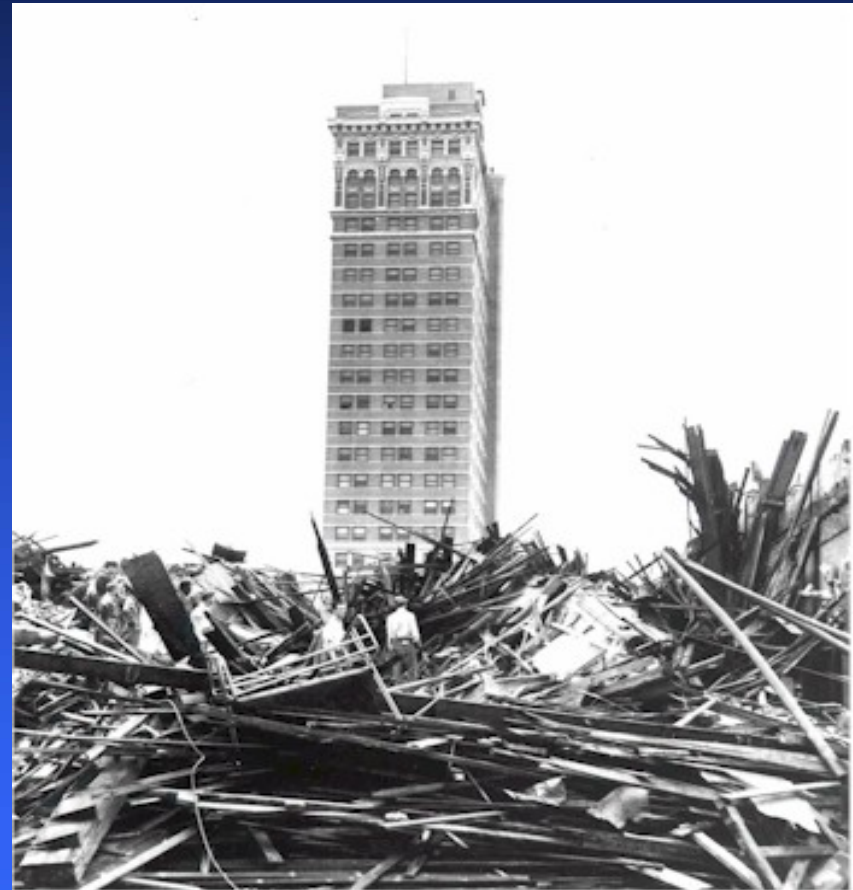




The Waco Tornado –

May 11, 1953

- F-5 tornado moved through downtown
- 114 killed
- More than 600 injured
- Roughly 200 businesses were destroyed.



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NWS Southern Region



The Jarrell Tornado – May 27, 1997

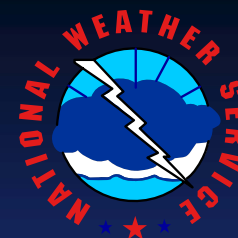


- Multiple vortex F-5 tornado moved through Jarrell
- 27 killed
- Few injuries
- $\frac{3}{4}$ mile wide tornado
- Complete destruction down to the foundation of Double Creek Estates subdivision



© 1997 Lon Curtis

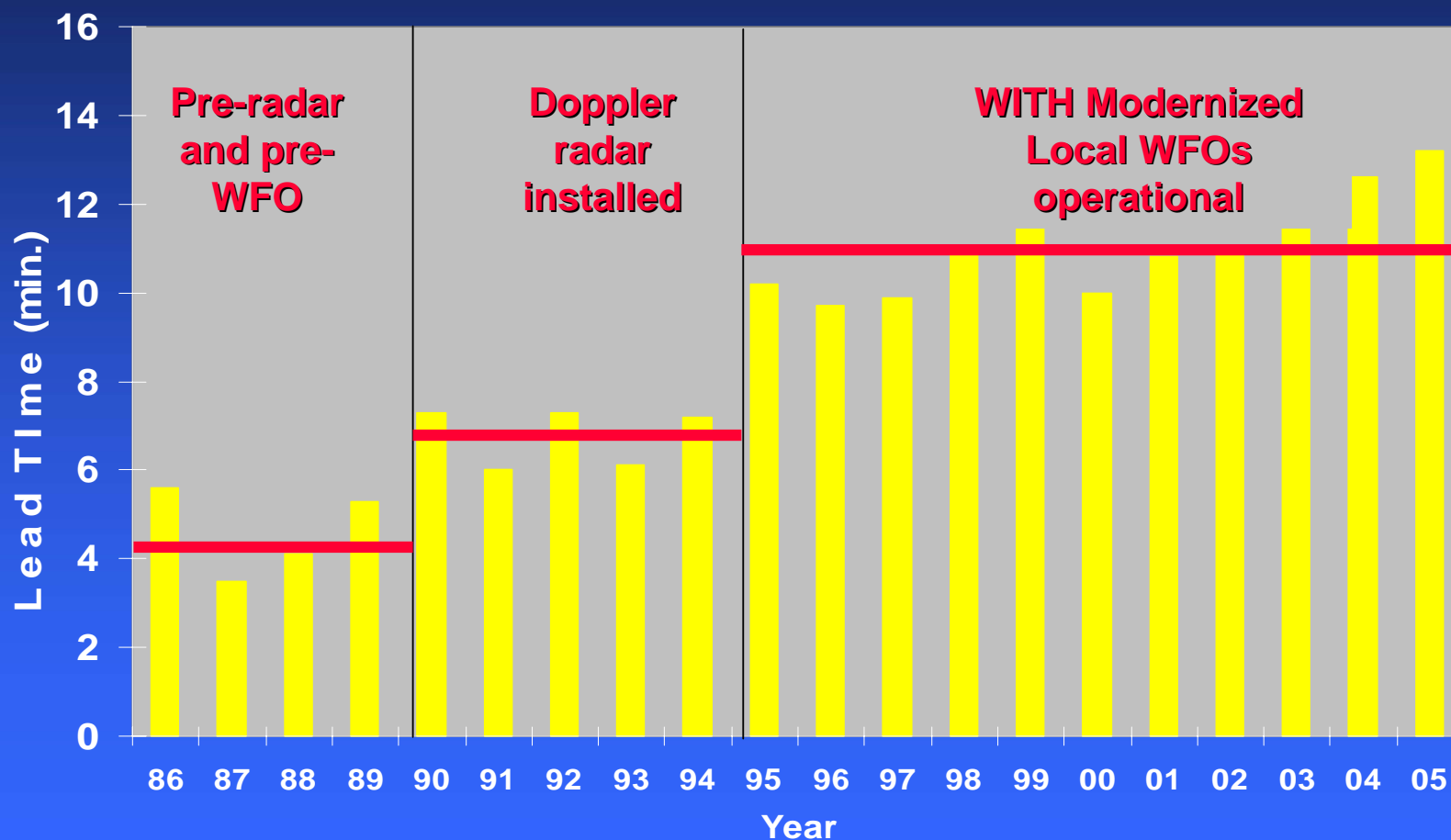
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Local WFOs Save Lives

By increasing Tornado Warning Lead Time

NWS Southern Region



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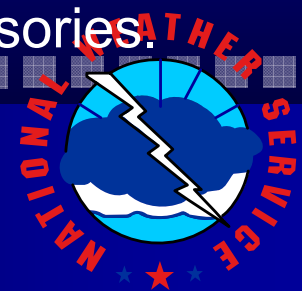
For the latest nationwide weather forecasts, warnings, radar, climate and conditions, check with the local National Weather Service Office at:

www.srh.weather.gov

- Serves as your one-stop reliable source for all the latest 24x7 weather information.
 - Developed for both our partners and public.
 - **Easy navigation**
 - Data given in the manner **you** need it.
 - Keeps you and your family aware for the best weather decisions.
- Has latest NWS Nat'l Hurricane Center graphics and advisories.



NWS SOUTHERN REGION
www.srh.weather.gov





NWS Southern Region

NWS Internet Forecasts

Quick Forecast information

Latest Weather Advisories

Current Weather Conditions

Quick Forecast Text

Radar and Satellite

Your National Weather Service forecast

Clay County, TX

Enter Your "City, ST" or zip code

NWS Norman, OK Homepage Forecast as of: 430 AM CST WED NOV 19 2003

Forecast at a Glance

TODAY	TONIGHT	THURSDAY	THURSDAY NIGHT	FRIDAY	FRIDAY NIGHT	SATURDAY	SATURDAY NIGHT	SUNDAY
Sunny	Clear	Mostly Sunny	Mostly Clear	Windy	Windy	T-storms Possible	T-storms Possible	Windy
Hi 72°F	Lo 45°F	Hi 78°F	Lo 52°F	Hi 76°F	Lo 52°F	Hi 75°F	Lo 45°F	Hi 50°F

Detailed 7-day Forecast

Hazardous weather condition(s):

Special Weather Statement

Today. Sunny. Highs in the lower 70s. West winds around 10 mph.

Tonight. Clear. Lows in the mid 40s. West winds around 10 mph. In the evening becoming light.

Thursday. Mostly sunny. Highs in the upper 70s. South winds 10 to 15 mph.

Thursday night. Mostly clear. Lows in the lower 50s. South winds 10 to 15 mph.

Friday. Partly cloudy. Windy. Highs in the mid 70s. South winds 15 to 25 mph.

Friday night. Partly cloudy. Windy. Lows in the lower 50s.

Saturday. Partly cloudy with a slight chance of showers and thunderstorms. Windy. Highs in the mid 70s.

Saturday night. Mostly cloudy with a 20 percent chance of showers and thunderstorms. Windy. Lows in the mid 40s.

Sunday. Partly cloudy. Windy. Cooler. Highs around 50.

Sunday night. Partly cloudy. Windy. Lows in the mid 30s.

Monday. Partly cloudy. Highs around 50.

Monday night. Partly cloudy. Lows in the mid 30s.

Current Conditions

Wichita Falls, Sheppard Air Force Base
Last Update on Nov 19, 1:52 pm CST

Fair
70°F (21°C)

Humidity:	25 %
Wind Speed:	Vrbl 3 MPH
Barometer:	30.19" (1021.9 mH)
Dewpoint:	32°F (0°C)
Heat Index:	77°F (24°C)
Visibility:	10.00 mi.

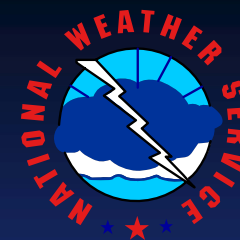
[More Local Wx:](#) [2 Day History:](#)

Radar and Satellite Images

Additional Forecasts & Information

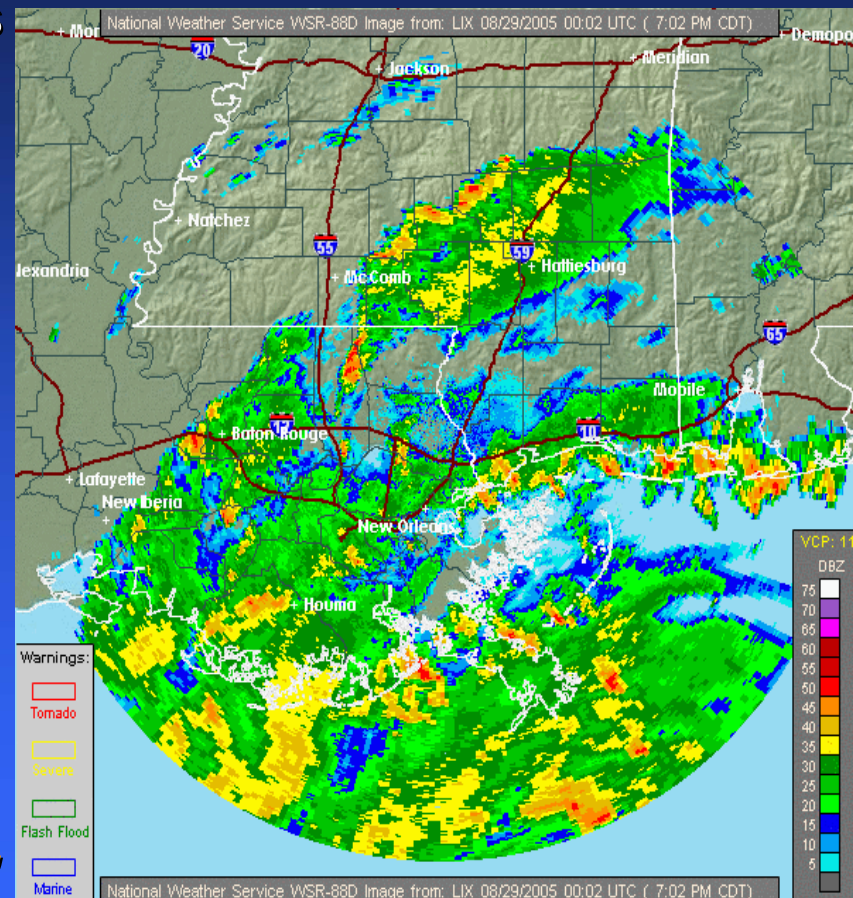
Forecast Discussion	Local Climatology
Hazardous Weather Outlook	Hazardous Weather Graphic
Detailed Forecast	Quick 7-day Forecast
Fire Weather Forecast	Regional Observations

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New NWS GIS Radar Webpages

- Available as time loops for ALL Weather Service Radars
- Radar images and warnings are GIS ready
- *Adds NWS warnings to the display
- Calculate distance from a storm and determine Latitude/Longitude
- Provides real time radar reflectivity, precipitation and now, *velocity* data!
- *A Southern Region initiative, now National ... as of Feb 21, 2006*



www.srh.weather.gov/ridge

NWS Southern Region



A Unique 2005 Atlantic Tropical Season

- Named storms: 27; previous record: 21 in 1933 (avg season: 11)
- Hurricanes: 13; previous record: 12 in 1969 (avg: 6)
- Major hurricanes hitting the U.S.: Four (Dennis, Katrina, Rita and Wilma); previous record: Three in 2004 (avg: 1)
- Lowest pressure over the Atlantic ever recorded 882 mb (Wilma).

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NWS Southern Region



2006 Outlook

- Official forecast to be issued May 22 from NWS National Hurricane Center
- Existing Indicators for above normal:
 - Middle of active multi-decadal cycle
 - Warmer Atlantic Sea Surface temps
 - Possible influence: La Niña/El Niño

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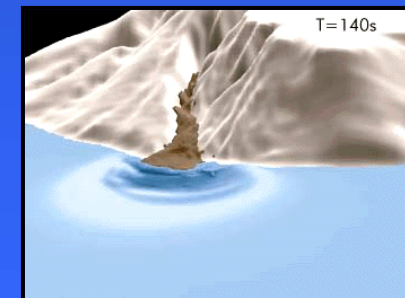
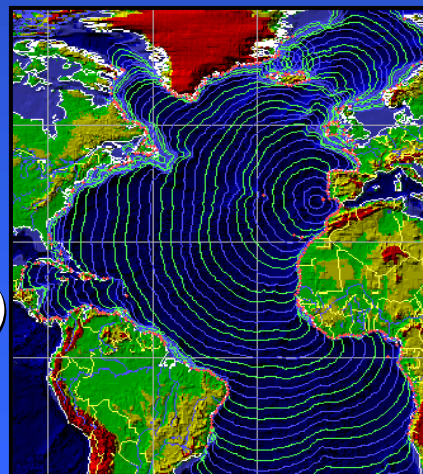
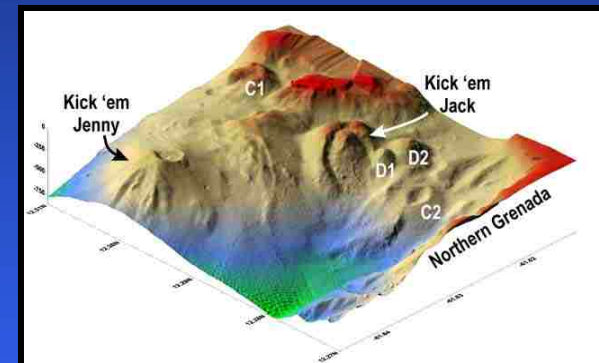
NWS Southern Region



Most Tsunami-genic events are from nearby short-fused*sources

NWS Southern Region

- Earthquakes
(many subduction areas/faults exist in the Caribbean, but rare in East & Gulf)
- Landslides
(continental shelves and trenches)
- Submarine and Land Volcanoes
(sources that do not affect the East and Gulf)
- Tele-tsunamis
(e.g. "Lisbon" Nov. 1, 1755)

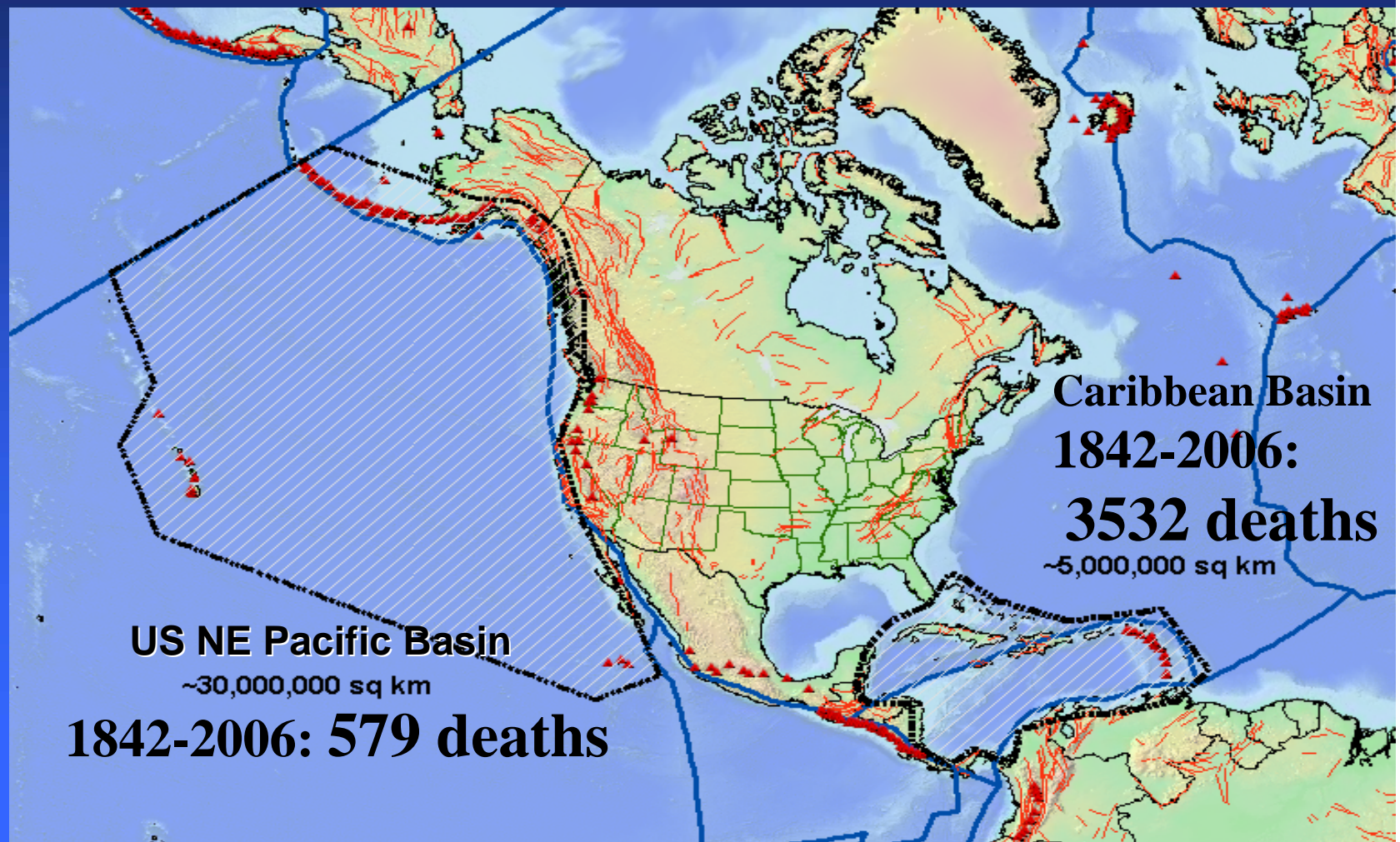


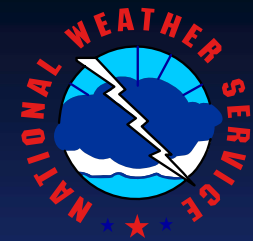
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Tsunami deaths since 1842 between two active tsunami basins....Both of much concern to the USA, The North-American Pacific coasts, including Hawaii and, The Caribbean Basin which includes Puerto Rico & US Virgin Islands

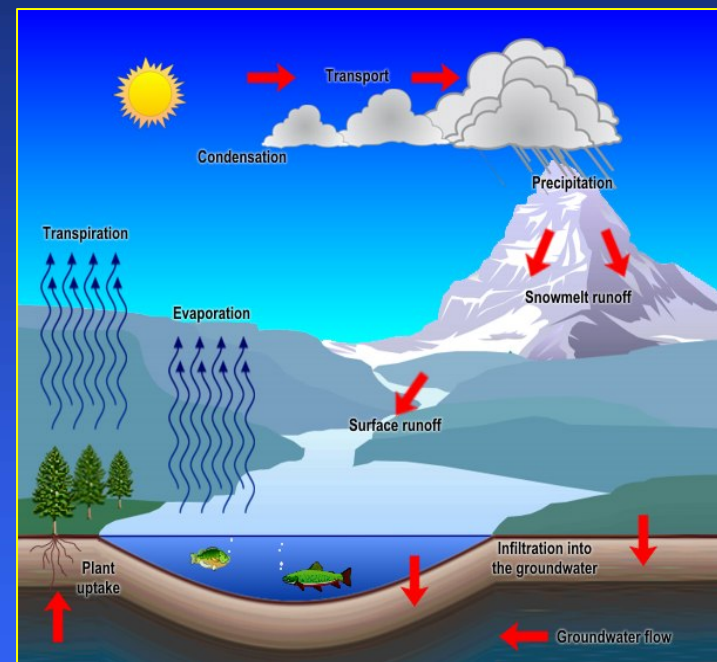
NWS Southern Region





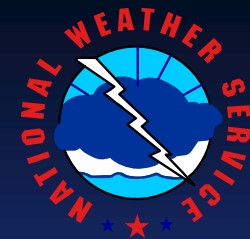
Project JETSTREAM

- An award winning weather learning tool for EMs, media, teachers, students, public, aviation and marine communities.
- Includes weather preparedness & safety tips.
- Includes all weather phenomena from thunderstorms to winter storms.
- ***A Southern Region initiative, now National!***



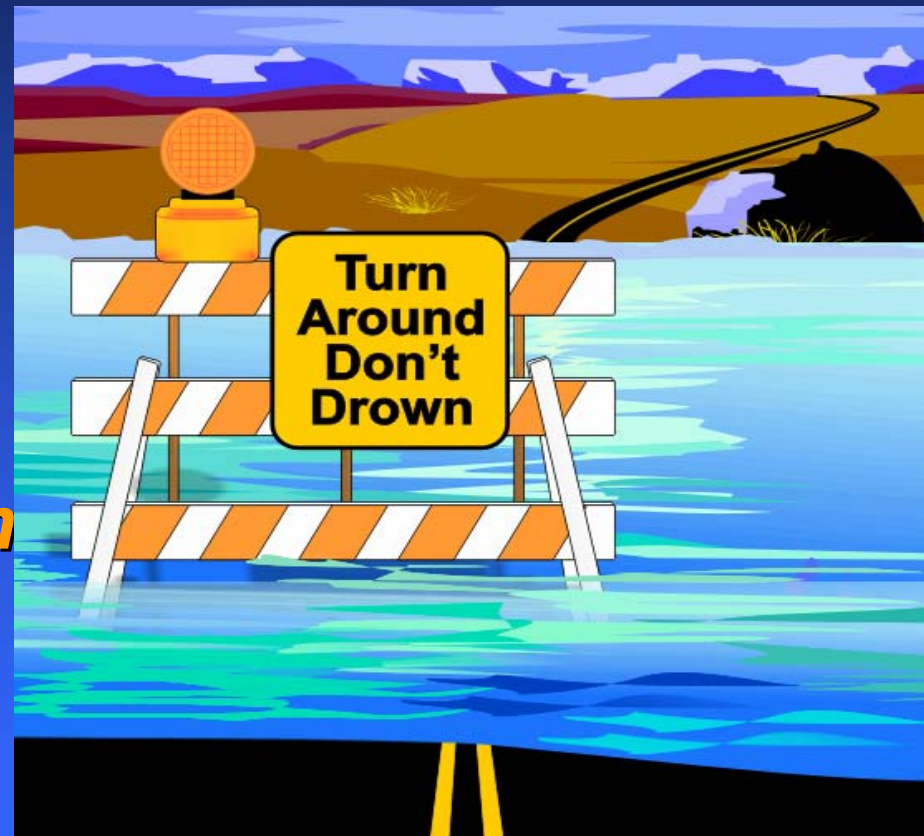
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NWS Southern Region



Turn Around Don't DrownTM

- Flood Safety Campaign.
- 30+ local, regional, and national partners.
- ***An NWS Southern Region initiative, now National!***



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NWS Southern Region

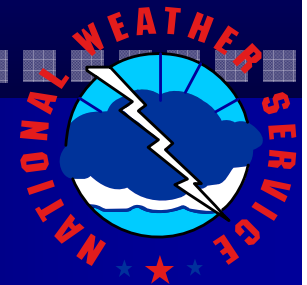
The Future of YOUR Local NWS WFOs and RFCs

Improvement must be building on the success of the modernization and its emphasis on our local mission delivery and services to partnerships –

...emphasizing mesoscale (local scale) weather & climate information, weather observations “mesonets”, better radar resolution with faster volume scans, finer scale local modeling, tactical met support to EM, digital forecasts... resulting in more lives saved.



NWS SOUTHERN REGION
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NWS Southern Region

**Your National Weather Service
epitomizes the concept:
...government closest to the
people, serves best!**

<http://www.srh.noaa.gov>



Discussions & Questions?

Bill Proenza, Director

National Weather Service - Southern Region
Fort Worth, Texas

This presentation is available at
<http://www.srh.noaa.gov>
click on the "*Message from the Director*"
and select the "*TCU/UCC*" presentation.

<http://www.srh.noaa.gov>

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